A Stativistic Theory of Lexical Aspect and its Impact on Grammatical Aspect

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1. Introduction

In this paper our aim is to apply Moreno Cabrera’s theory on subevent structure (2003) to the aspectual system in Spanish and show that it neatly resolves some of the problems which have traditionally arisen. The article is arranged as follows:

Part 2 introduces the concept of lexical aspect together with the systems of classification most commonly used in the bibliography.

Part 3 is divided into two sections: in the first Moreno Cabrera’s model of lexical aspect is introduced, and in the second this model is applied to grammatical aspect.

In Part 4 four problems are studied to demonstrate the explanatory power of the theory: the first concerns the Imperfective, Progressive and Continuous aspects; the second the granularity of activities and accomplishments; the third how the Resultative and the Experiential Perfect relate to the different lexical aspectual classes; and the last addresses the quantification of states that are apparently not represented syntactically.

2. The Concept of Lexical Aspect

It’s Vendler (1957) who provides us with the best known classification of
lexical aspect. He identifies four lexical aspectual classes:

(1)  
\begin{itemize}
  \item **States**: Ama a Salomé.  
    ‘He loves Salomé’
  \item **Activities**: Camina por el parque.  
    ‘He walks in the park’
  \item **Accomplishments**: Construyó la casa.  
    ‘He built the house’
  \item **Achievements**: Llegó a la estación.  
    ‘He arrived at the station’
\end{itemize}

As Bertinetto shows (1986:113), these are the basic types of predicate used in other works, such as Bennett and Partee (1972), Mourelatos (1978) and Gabbay and Moravcsik (1980). More recent works, such as Rothstein (2004), also distinguish between these four types.

The first distinction to be made between Vendler’s four types of predicate concerns the presupposition of a natural endpoint in the event. Telic events have one and atelic events do not. States and activities are atelic, whereas accomplishments and achievements are telic. Atelic predicates are carried out throughout the event, but telic predicates are not. This is easily demonstrated: if Juan stops loving Salomé, or if Carlos stops walking in the park, it will be true to say that Juan has loved Salomé and that Carlos has been walking in the park. On the other hand, if Pepe is building the house and is interrupted, he will not have built the house. Similarly, if María is arriving at the station and is stopped, it is not true to say she has arrived at the station. Atelic events can be said to cease or stop, but not to culminate, whereas telic events can stop—if the telos or end is not reached—or culminate—if the telos is reached. There is also syntactical evidence for this difference, i.e. when time adverbials with *durante* ‘for’ or *en* ‘in’ followed by quantified noun phrases can be used: atelic predicates combine with *durante* and telic ones with *en*:

(2)  
\begin{itemize}
  \item **States**: Estuvo triste {*en / durante} varios meses.  
    (STATE)  
    ‘He was upset {in/for} several months’
  \item **Activities**: Caminó {*en / durante} media hora.  
    (ACTIVITY)  
    ‘He walked {in/for} half an hour’
\end{itemize}

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2 The translation of the examples into English is merely for illustrative purposes.

3 For the concept of telicity, see Dahl (1978), Declerck (1979b), Delfitto and Bertinetto (1995) and Depraetere (1995). I will return to this subject in section 3.2.
c. Fabricó este violín {en / *durante} un año. (ACCOMPLISHMENT)
   ‘He made this violin {in/for} a year’

d. Se murió {en / *durante} muy poco tiempo. (ACHIEVEMENT)
   ‘He died {in/for} a very short time’

We can also divide Vendler’s four types of events into stative or non-dynamic and non-stative or dynamic events. States are stative and activities, accomplishments and achievements are dynamic. States are homogeneous throughout the event—they don’t vary or change, progress or move towards a limit.

The stative or non-stative nature of a predicate can be demonstrated in many ways. For example, stative predicates are, in principle, incompatible with the imperative (3), unless there is a controlling subject, as in (4):

(3)  a. #Ten anginas.
     ‘Have tonsillitis’
   b. #Sé rubio.
     ‘Be blond’

(4)  a. Estáte ahí quieto.
     ‘Sit still’/‘Stand still’
   b. Permaneced agachados.
     ‘Stay down’

Stative predicates are also incompatible with progressive periphrasis, 4 (5), something which will be dealt with in more detail in section 4.1:

     ‘I’m having five brothers and sisters’
   b. *Estoy siendo rubio.
     ‘I’m being blond’

Lastly, we can distinguish between durative and punctual events. States, activities and accomplishments are durative and achievements are punctual. This means that in achievements the beginning and the end of the event coincide. In principle, therefore, achievements don’t admit either progressive periphrasis, which isolates a central phase of the event, or adverbials of duration, as shown below in (6a) and (6b) respectively:

4 The initial letter will be in the lower case for morphological expressions such as ‘progressive periphrasis’ or ‘imperfective simple past’ and the upper case for semantic content such as ‘Progressive’ or ‘Imperfective’.
   ‘The boy is being born’
   b. *Juan encontró un décimo de lotería en media hora.
   ‘John found a lottery ticket in half an hour’

However, achievements are often accompanied by a phase that precedes the culmination of the \textit{telos}. In such cases, both progressive periphrasis and adverbials of duration may appear, as shown in (7a) and (7b) respectively:°

(7)  a. Se está muriendo.
   ‘He is dying’
   b. Llegué a la plaza en cinco minutos.
   ‘I got to the square in five minutes’

As we have said, Vendler’s classification has been fundamentally respected in more recent works. Nevertheless, some later authors have defined it more closely. Bertinetto (1986) makes some distinctions that Vendler does not.

Bertinetto distinguishes between durative and non-durative predicates. The non-durative category includes both telic predicates—Vendler’s achievements—and non-telic predicates—which we will simply call puntual atelics. This category of non-durative and atelic predicate, also propounded by Smith (1991), was absent in Vendler’s classification.

Bertinetto also divides up achievements into reversible and non-reversible types. Reversible achievements, i.e. those telic predicates which lead to a non-permanent state, possess the curious quality of permitting the quantification of the state bounded by two successive and contrasting changes. In the sentence \textit{Se durmió durante media hora}, ‘He went to sleep for half an hour’, it is obvious that the adverbial \textit{<durante + quantified noun phrase>} does not quantify the time it took him to go to sleep, but the time he was asleep, i.e. the time between going to sleep and waking up ((1986:282-283)). This will be discussed further in section 4.4.

Smith’s classification (1991:30) also essentially respects Vendler’s. As in Bertinetto (1986), it introduces a fifth basic category of punctual atelic predicates which it calls semelfactive, a name we will not use. This classification of predicates is based on the combination of three features \([\pm\text{ Static}], [\pm\text{ Durative}] \text{ and } [\pm\text{ Telic}],\) resulting in the following:

\footnotesize
\[ \text{[± Static], [± Durative] and [± Telic], resulting in the following:} \]

\footnotesize
\[ 5 \text{ For achievements in the Progressive see Rothstein (2004: chap. 2).} \]
Table I

<table>
<thead>
<tr>
<th></th>
<th>Static</th>
<th>Durative</th>
<th>Telic</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>+</td>
<td>+</td>
<td>0 🅆</td>
</tr>
<tr>
<td>Activities</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Accomplishments</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Punctual atelic</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(Semelfactive)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievements</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Table I can be illustrated with the following predicates:

(8) **States:**
- tener hambre, estar enfadado, estar aquí, ser madrileño.
  ‘to be hungry, to be angry, to be here, to be from Madrid’

**Activities:**
- correr, caminar, bailar, dormir.
  ‘to run, to walk, to dance, to sleep’

**Accomplishments:**
- escribir la carta, hacer las maletas,
  ‘to write the letter, to pack your bags’
- elaborar la estrategia, ir de Madrid a Barcelona.
  ‘to draw up the strategy, to go from Madrid to Barcelona’

**Semelfactives:**
- estornudar, toser, parpadear, sobresaltarse.
  ‘to sneeze, to cough, to blink, to jump (be startled)’

**Achievements:**
- morir, nacer, dormirse, llegar.
  ‘to die, to be born, to go to sleep, to arrive’

The concept of lexical aspect has been very fertile in modern linguistics and the establishment of these five basic classes of predicate is fundamental for the study of the grammar of aspect and time adverbials. We hope that any new theory will avail of the explanatory power of this classification. In Part 3 we will go on to see how Moreno Cabrera’s theory explains these distinctions.

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As is usual, the [+ ] sign indicates that the group possesses the characteristic in question and the [- ] sign indicates the opposite; the zero indicates that applying the characteristic to the group is impossible or irrelevant. Maintaining that the telic/atelic characteristic is irrelevant to states gives rise to the problem of how to explain that the atelicity of states is manifested syntactically when combined with durante ‘for’ and not en ‘in’, as seen in (2a).

Moreno Cabrera (2003) studies the relationship between syntax and semantics, specifically the internal structure of events and thematic roles. Here we are only interested in those of Moreno Cabrera’s ideas that concern the internal structure of events, and how this affects grammatical aspect. Consequently, we will not be looking at some other fundamental questions in Moreno Cabrera’s book. We will concentrate on his ideas on subevent structure along the lines of previous works by McCawley (1968), Dowty (1979), Jackendoff (1972) and (1990), Pustejovsky (1991) or Levin and Rappaport (1995).

3.1. *A Stativistic Theory of Lexical Aspect*

Moreno Cabrera classifies events into three types: states, processes and actions. The states are the primitive elements of the theory, since the processes are defined as transitions between states and the actions as processes in relation to a causing entity. As far as our work is concerned, the difference between processes and actions is irrelevant. What is essential, however, is the difference between telic and atelic events, regardless of whether they are processes or actions. In this section we will look at Moreno Cabrera’s classification of events, and thereafter at the concept of telicity.

Moreno Cabrera (2003:61) affirms that the characteristic feature of a state is that an entity is in a given place or has a given property. The former is a locative state, the latter attributive. He picks up Langacker’s idea (1987:214 ff; 2000:10-12) that states are atemporal, i.e. that temporal evolution is not an intrinsic or central aspect of a state. According to Moreno Cabrera, this doesn’t mean that states occur outside of time, but rather that time plays no defining role in them, hence their lack of dynamicity.

Moreno Cabrera conceives processes as relationships between states: “A process exists when an entity goes from being in one state to another”. So for this relationship between two states to exist, they must share the same entity. Just as there are both locative and attributive states, there are two types of processes: displacements and mutations, respectively. In displacements the entity changes its place and in mutations it totally or partially changes its property.

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7 For example thematic roles, especially the experiencer or the integration and disintegration of events.

8 Relationships and not transitions; this will be further clarified later.
Moreno Cabrera’s processes may correspond to activities, accomplishments and achievements, since neither the telicity nor the durativity/punctuality of an event characterises a process.

Actions are defined (p.165) as relationships between processes and entities. “These relationships are usually interpreted as being agentive or causative: an entity originates, controls or is responsible for a given process.” Just as there are two types of process, there are locomotive actions or locomotions, based on displacement processes, and modificative actions or modifications, based on mutation processes.

Moreno Cabrera’s actions can be atelic or telic, and may correspond, therefore, to Vendler’s activities or accomplishments, respectively.

Table II illustrates the relationship between the different types of states, processes and actions.

<table>
<thead>
<tr>
<th>STATES</th>
<th>PROCESSES</th>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributions</td>
<td>Mutations</td>
<td>Modifications</td>
</tr>
<tr>
<td>Locations</td>
<td>Displacements</td>
<td>Locomotions</td>
</tr>
</tbody>
</table>

For Moreno Cabrera, states are the only primitive events, since processes are changes of state, and actions relationships between processes and entities. This means there cannot be actions without processes, but there can be processes without actions. In the same way, there are no processes without states, but there are states without processes. In short, there is no event without a state. As a result, there is a hierarchy in subevent structure:

1- States are primitive events.
2- Processes are relationships between states.
3- Actions are relationships between processes and entities.

In Table III there is a detailed definition of each type of event:
It is important to note that processes can involve intermediate states. Let us take as an example the event denoted by the predicate *ir desde casa a la estación*, ‘to go from one’s home to the station’, in the sentence *Juan fue desde casa a la estación*, ‘John went from his home to the station’. This is a process, which, as explained, is a relationship between states. In this case the states are [Juan, EN casa] ['Juan, AT home'] and [Juan, EN la estación] ['Juan, AT the station']. This relationship between states is not instantaneous, however; it presupposes the existence of intermediate states. Note that in the example *Juan está yendo desde casa a la estación*, ‘Juan is going from his home to the station’, the focus is on precisely one of these intermediate states. We can demonstrate the existence of these intermediate states by introducing a variable of place numbered from 1 to N. All states over 1 and under N are intermediate states:

\[
\text{PROCESS } [\text{STATE } (Y, \Phi), \text{STATE } (Y, \Theta)]
\]

Where \(Y\) is a variable over individuals and \(\Phi\) and \(\Theta\) are variables over properties or places.

The relationship between states may or may not be temporal. Moreno Cabrera (2003:123ff) affirms that a process is a relationship and not a transition between states. Indeed, verbs of motion often appear in sentences where there is no motion at all:

(9) a. La carretera va de Madrid a Zaragoza.
   ‘The road goes from Madrid to Zaragoza’
   b. La nube va desde Valladolid a Burgos.
   ‘The cloud goes from Valladolid to Burgos’
The examples in (9) are from Moreno Cabrera (2003:123).

Moreno Cabrera explains that this is due to the fact that verbs of motion do not express motion directly, but that motion in sentences such as *Juan va de Madrid a Zaragoza*, ‘Juan goes from Madrid to Zaragoza’, is deduced thanks to our knowledge of the world, i.e. of the characteristics of the entity usually denoted by a name such as Juan.

On page 125, however, Moreno Cabrera maintains that the examples in (9) may be considered states. To explain why verbs of motion are used to denote fictitious motion, he structures (9a) as follows:

(10) PROCESS (STATE (the road, Madrid), STATE (the road, Zaragoza))

Taking into account that the structure of *Juan va de Madrid a Zaragoza* is the following, Moreno Cabrera explains that verbs of motion are used in both, because they are formally identical:

(11) PROCESS (STATE (Juan, Madrid), STATE (Juan, Zaragoza))

As already stated, the different interpretation is clearly due to what we know about roads and individuals called Juan. Moreno Cabrera believes that the sentences in (9) could be considered states. The essential difference between (10) and (11) is that in (10) each of the states is predicated of part of the individual denoted by *la carretera*, whereas the states in (11) are predicated of the whole of the individual denoted by *Juan*. Since an individual who is in one place at a given time cannot be in another at the same time, if two locative states of John are to be predicated, each must be at a different time. Motion comes about precisely because the two states are predicated at different times, and since these times are in an order, John must have been in one place before the other and moved from the first to the second. Therefore, the states in (11), but not those in (10), are related temporally. This fact is crucial: as will be seen, it conditions the syntax of the two types of structure significantly. For example, as Moreno Cabrera points out, the sequences in (10) do not permit the Progressive, whereas those in (11) do:

(12) a. #La carretera está yendo de Madrid a Zaragoza.
    ‘The road is going from Madrid to Zaragoza’

    b. Juan está yendo de Madrid a Zaragoza.
    ‘John is going from Madrid to Zaragoza’
We will come back to the difference between examples such as (12a) and (12b), but what we wish to emphasise is that verbs of motion are used in structures which are devoid of motion. In our opinion, this is something that needs to be explained, and the model set out above provides us with a natural explanation for it.

Moreno Cabrera’s theory is remarkably simple: the only primitive event is the state. Now we are going on to see how it fits in with the theory of aspect.

3.2. States and Telicity

In this section we are going to look at the concept of telicity in Moreno Cabrera’s theory of lexical aspect. We have already established that all events are made up of states. Now we are going to take a closer look at these states and at the concept of telicity, which was essential to Vendler’s classification and is a basic concept in the field of aspect.

We should ask ourselves if all states in the different types of events share the same properties and function in the same way. We are going to see that this is not so.

Let us start from the premise that stative events are determined lexically, i.e. their characteristics are functions of the lexical properties of the words that denote them.

We will also assume that the final state in an accomplishment and, to the extent that we will later explain, the resulting state in an achievement are determined in this way. These two types of states will be called goal-states. A goal-state is related temporally to a previous state and defines a process as telic.

As is frequently reiterated in the bibliography, the goal-state in accomplishments is determined compositionally. Whether the direct object of transitive predicates is definite or indefinite, and quantified or unquantified, is a crucial factor for the lexical aspect of a good number of these predicates. Let us consider the following examples:

(13) a. Juan comió manzanas.
    ‘John ate apples’
    b. Juan comió tres manzanas.
    ‘John ate three apples’

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9 Some transitive predicates are activities, e.g. *empujar el carro*, ‘to push the cart’, as is demonstrated by the fact that it combines with an adverbial beginning with *durante* ‘for’ and not *en* ‘in’.
In (13a), where there is a “bare” plural direct object, the predicate is atelic, in fact an activity, whereas in (13b) the quantified direct object ‘three apples’ makes the predicate telic, specifically an accomplishment. This is because ‘three apples’ bounds the action by providing it with a goal-state, the state where the three apples have been eaten, beyond which point the event cannot go.

In achievements, the goal-state is part of the lexical content. For example, the resulting state *estar muerto*, ‘to be dead’, is contained within the verb *morir*, ‘to die’. Consequently, as Delfitto and Bertinetto maintain (1995:137), while telicity is a function of the lexical content of achievements, this is not the case in accomplishments, where telicity depends on the syntactical nature of the complements.

The initial state may also be determined lexically, as with verbs of motion:

(14) Juan fue de Madrid a Barcelona.

‘John went from Madrid to Barcelona’

In this example there is an origin-state (*Juan está en Madrid*, ‘John is in Madrid’) and a goal-state (*Juan está en Barcelona*, ‘John is in Barcelona’).

There are two types of states determined lexically: those denoted by stative predicates (15a), and the goal-states in achievements (15b). In addition, there are two types of state also determined lexically but compositionally: the origin-state (15c), and the goal-state in accomplishments (15c) and (15d). All examples are in bold:

(15) a. *Juan está en su casa.*

‘John is at home’

b. Juan se murió. (*Juan está muerto.*)

‘John died’  (‘John is dead’)

c. Juan caminó desde el parque hasta la estación. (*Juan está en el parque/Juan está en la estación.*)

‘John walked from the park to the station’  (‘John is at the park/John is at the station’)

d. Juan ha escrito la carta. (*La carta está escrita.*)

‘John has written the letter’  (‘The letter is written’)

No other states are determined lexically. Let us see why. We have said that in accomplishments the final state is a goal-state and is determined compositionally by the verb and its direct object if the verb is transitive. If
the accomplishment reaches the telos, as in (16), we can predicate that the house has been built precisely because estar construida la casa (Lit. ‘to (have) be(en) built the house’) is the goal-state of the event denoted by construir la casa, ‘to build the house’.

(16) Juan construyó la casa.
    ‘John built the house’

Let us now look at the same accomplishment in the Progressive Imperfective Aspect:

(17) Juan está construyendo la casa.
    ‘John is building the house’

The intermediate states are not determined lexically. Consequently, in (17) we cannot know exactly what Juan is doing: he may be bricklaying, or wiring, or even working on the plans. We only know that one of the undefined transition states of the construir la casa, ‘to build the house’, event is being predicated. Indeed, this detailed information about the specific job he is doing is not part of the lexical information in the predicate construir la casa. If we imagine that John is doing these types of jobs it is due to our knowledge of the world: a house made of adobe requires very different types of work from a wooden one, for example.

The states that are not origin-states or goal-states, which we will call path-states, are characteristically precarious. This is due to the fact that a path-state can always be followed by another path-state, whereas a goal-state cannot. A path-state is or can be linked to another path-state after it. Precariousness is therefore defined as the characteristic of a state that is related temporally with a subsequent state.

Taking into account everything we have said above, Vendler’s classification may be translated into the following Table IV. Each of Vendler’s lexical aspectual classes is matched to its equivalent in Moreno Cabrera’s model. S stands for state:
Table IV

<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>States – S</td>
<td>(Estar enfermo / Estar en Madrid ‘to be ill / to be in Madrid’)</td>
</tr>
<tr>
<td>Activities – S</td>
<td>(Caminar ‘to walk’)</td>
</tr>
<tr>
<td>Accomplishments – S</td>
<td>(Construir una casa ‘to build a house’)</td>
</tr>
<tr>
<td>Accomplishments – S</td>
<td>(Ir de Madrid a Barcelona ‘to go from M. to B.’)</td>
</tr>
<tr>
<td>Achievements – S</td>
<td>(Morir ‘to die’)</td>
</tr>
<tr>
<td>Punctual atelics – S</td>
<td>(Estornudar ‘to sneeze’)</td>
</tr>
</tbody>
</table>

It is necessary to clarify the terms first-state and origin-state. An origin-state is clearly a first-state, but not all first-states are origin-states. Any event which is taking place or has taken place has had a beginning. Therefore all plural events have a first-state; however, not all events have an origin-state. In order to understand this difference, let us take the following examples:

(18) a. Juan corrió por el parque.
     ‘John ran around the park’

b. Juan corrió desde la fuente hasta el banco.
     ‘John ran from the fountain to the bench’

c. Juan corrió hasta el banco.
     ‘John ran to the bench’

In (18a) there is a first-state, when John begins to move, but this is not an origin-state. In (18b), on the other hand, the first-state is at the same time an origin-state, which is specified lexically by the prepositional phrase desde la fuente ‘from the fountain’. Notice that the goal-state can be specified although the origin-state is not (18c).

It should be noted at this point that the classification in Table IV is consistent with Smith’s five classes of lexical aspect (1991:30), since the following distinctions are made:

**Singular / non-singular events:**
states / activities, accomplishments, achievements, punctual atelics;
**Instantaneous / non-instantaneous events:**
achievements, punctual atelics / activities, accomplishments;

**Events with goal-states / without goal-states:**
accomplishments, achievements / states, activities, punctual atelics.

In Table V the predicates are classified according to the three features plurality, instantaneity, and telicity:

<table>
<thead>
<tr>
<th></th>
<th>Plurality</th>
<th>Instantaneity</th>
<th>Telicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Activities</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accomplishments</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Punctual atelics</td>
<td>+</td>
<td>+</td>
<td>-</td>
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<tr>
<td>Achievements</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table V shows us that states are the only singular, i.e. non-plural events. This feature, as with Smith’s stativity, distinguishes them from the other types of event. This is because states are the only single-event predicate, and needless to say that event is a state. We have said that Moreno Cabrera’s processes (2003) correspond to Vendler’s activities, accomplishments and achievements. Naturally, this is only true if the relationship between the states in the process concerned is dynamic. If this is not the case, as in (9a), *La carretera va de Madrid a Barcelona*, ‘The road goes from Madrid to Barcelona’, the process can be classified as a non-dynamic process or as a state made up lexically of two states.

Among plural or non-singular events the fact that there may be two or more states in the relationship separates instantaneous events (achievements and punctual atelics) from non-instantaneous ones (activities and accomplishments). Instantaneous events contain only one change of state, since they are made up of two states. Note that states are not classified according to this feature, since time does not play a defining role in them. This is because they are made up of a single event.

Lastly, telicity depends on whether there is a goal-state or not.

Neither stativity nor dynamicity is a basic feature, since they are derived properties. Stativity, in the sense of the absence of dynamicity, is a consequence of the singular nature of states, just as dynamicity is due to the
possibility of establishing a temporal relationship between the states that constitute an event.

In the classification we have adopted, stativity, durativity and telicity are indeed not primitive features, but are deduced from the number of states in the event and their characteristics. Our classification distinguishes between A) single-state events, B) events with two or more states, and C) those in which the final state is a goal-state.

Let us go back to Table IV. States are made up of state events, which, as we have explained, are the only primitive ones in the theory. All other events are relationships between states. States may be measured from their beginning to their end (19a) or may be taken in a subinterval (19b):

(19) a. Estuvo enfermo durante varios años.
   ‘He was ill for a few years’
   b. Cuando entré, estaba muerto.
   ‘When I went in, he was dead’

Activities are relationships between states, the last of which is never a goal-state. It should be remembered that goal-states are determined lexically or compositionally. Dynamicity derives from the fact that there may be a temporal relationship between the states.

A section of an activity that contains at least two states is an activity, whereas a section containing only one state is a state. This is precisely the difference between the continuous periphrasis in (20a) and the progressive periphrasis in (20b). In the continuous the auxiliary is a verb of motion, whereas in the progressive it is a copula. This difference will be looked into in more detail later.

(20) a. Juan va diciendo tonterías.
   ‘John keeps talking nonsense’
   b. Juan está diciendo tonterías.
   ‘John is talking nonsense’

Accomplishments are relationships between states where the final state is a goal-state. If we compare the examples in (21) with (22), we will see that the telicity in (21) stems from the fact that the direct object defines a final state, the goal-state, which finishes off the event, making it impossible for it to continue any longer. In (22) on the other hand, the direct object does not define a goal-state, and the events could have lasted indefinitely:
(21) a. Juan escribió la novela en tres meses.
   ‘John wrote the novel in three months’
   b. Se comieron todos los pasteles.
   ‘They ate all the cakes’

(22) a. Juan escribió novelas durante años.
   ‘John wrote novels for years’
   b. Comieron pasteles.
   ‘They ate cakes’

When an event reaches the goal-state, we say it culminates; if it is
interrupted before the goal-state we say it stops or ceases. In (23a) the novel
was finished, so the event is said to have culminated. In (23b), the novel was
not finished, so the event ceased, but did not culminate:

(23) a. Terminó de escribir la novela.
   ‘He finished writing the novel’
   b. Dejó de escribir la novela.
   ‘He stopped writing the novel’

Accomplishments are typically exemplified with transitive predicates which
have a definite or quantified object, but intransitive verbs of motion which
denote a path are also accomplishments if the destination (24a) or both the
origin and destination (24b) are specified:

(24) a. Se desplazaron todos al jardín.
   ‘Everyone went to the garden’
   b. Fue desde Madrid a Barcelona.
   ‘He went from Madrid to Barcelona’

If an accomplishment is in the Progressive, the goal-state has not been
reached:

(25) Juan está escribiendo una novela.
   ‘John is writing a novel’

This is the imperfective paradox: accomplishments are defined by the goal-
state and in the Progressive the goal-state has not been reached. There is,
however, a difference between the Progressive in an accomplishment and
one in an activity:
(26) a. Juan estaba comiendo tres manzanas.
   ‘John was eating three apples’
   b. Juan estaba comiendo manzanas.
   ‘John was eating apples’

The fact that the event does not culminate does not make (26a) synonymous with (26b). The predicate *comer tres manzanas*, ‘to eat three apples’, contains a goal-state, which despite not being reached, defines the event itself.

According to Rothstein (2004:91ff), a property of accomplishments is their incrementality. This means they progress towards a goal, which is a goal-state in our terms, while activities may lack an order and not progress. John can eat apples nibbling at one and then another without ever finishing, but if three apples are being eaten the event has to progress towards its goal, i.e. the state where the three apples have been eaten. Accomplishments are transitions between ordered states that progress towards the goal-state. Activities are simply transitions between states which are not ordered.

The presence of the goal-state in accomplishments is therefore essential to distinguish them from activities, since it explains the property of incrementality. Rothstein points out that, although not always possible, two activity events can be joined together to form one single event of the activity denoted by the predicate in question. If John ran from three to four o’clock and from four to five we can in certain circumstances say that he ran from three to five. This, however, is never possible with accomplishments: if John ate three apples and then ate three more, we could never claim there was one single event with the eating of three apples. Telic events are not cumulative. We could say that John has eaten six apples, but this would be a different event. The cumulative nature of activities is due to the absence of a goal-state, and the presence of a goal-state in accomplishments precludes cumulativity.

Achievements contain both an origin-state and a goal-state, one of which is in a negative form with respect to the other. Indeed, it has often been maintained that achievements denote changes of state. In (27a) the event denoted by *murio*, ‘he died’, may be understood as a transition from the state of being alive to the state of not being alive. Similarly, (27b) could be a transition from the state of not being in the shop to being in it:

(27) a. Murió.
   ‘He died’
   b. Entró en la tienda.
   ‘He went into the shop’
It may be noted that in (27b) there is a verb of motion, but one which does not denote a path.

Lastly we have the punctual atelic predicates, those which were not included in Vendler’s classification. It is obvious from the name we have given these events that they are atelic, like activities, and punctual, like achievements. They may be described as transitions between two states neither of which is a goal-state. The fact that the final state of a punctual atelic is not a goal-state makes it possible for these predicates to join together and form activities. This is the case in (28):

(28) a. Juan parpadeó.
     ‘Juan blinked’
 b. Juan estornudó.
     ‘Juan sneezed’

The examples in (28) may quite easily be interpreted as being semelfactive, i.e. John blinked or sneezed just once, or as iterative, i.e. when the action is repeated. When the interpretation is iterative, there is no difference between a punctual atelic predicate and an activity. Punctual atelics are activity events that may be punctual but don’t have to be. This is in fact another example of the property of cumulativity that Rothstein attributes to activities, and which is a consequence of the absence of a goal-state.

4. Consequences for Aspects Theory

In Part 3 we have described Moreno Cabrera’s theory (2003) of lexical aspect, in which states are the only primitive events, and we have explained the role of telicity in it. Now we are going to look at some typical problems of the temporal-aspectual field to find out how they can be resolved using this model. The problems are the following: first, the nature of progressive and continuous periphrases—and at the same time that of the Progressive and Continuous aspects—and how they relate to the Imperfective aspect. We will then go on to the question of granularity, i.e. if activities are homogeneous but not dense. Thirdly, we will study the difference between the Resultative Perfect and the Experiential in relation to lexical aspectual classes. Lastly, we will look into the possibility of quantifying some goal-states with adverbials even if the event is not in the Resultative Perfect aspect.
4.1. The Imperfective, Progressive and Continuous Aspects

In the bibliography different values of the Imperfective aspect are admitted. Bertinetto (1986:162-181) defines its basic property as that of not stating the conclusion of the predicate, and distinguishes between three possible types: the Progressive, the Habitual and the Continuous. The following are examples:

(29)  a. Cuando entré, María fregaba el suelo. (PROGRESSIVE)
    ‘When I went in, Mary was mopping the floor’
  b. En aquella época, Juan iba andando al trabajo. (HABITUAL)
    ‘In those days, John walked to work’
  c. Durante la reunión Marta decía tonterías a todo el mundo. (CONTINUOUS)
    ‘During the meeting Martha was making stupid remarks to everyone’

These three values can be made explicit by means of periphrasis:

(30)  a. Cuando entré, María estaba fregando el suelo. (PROGRESSIVE)
    ‘When I went in, Mary was mopping the floor’
  b. En aquella época, Juan solía ir andando al trabajo. (HABITUAL)
    ‘In those days, John used to walk to work’
  c. Durante la reunión, iba diciendo tonterías a todo el mundo. (CONTINUOUS)
    ‘During the meeting, she kept making stupid remarks to everyone’

In the Progressive the focus is on a single moment. The Habitual Imperfective is used with predicates where the repetition of the situation can be said to characterise the subject. In the Continuous the focus is on a period. According to Bertinetto (1986:171), the Continuous differs from the Progressive in that the former does not focus on a single moment, whereas the latter does. The Habitual differs from the Continuous (and the Progressive) because it involves a multiple situation, i.e. the repetition of the event on different occasions. A habit may be conceived as a property of the subject involving the regular repetition of a type of event. Bertinetto (1994:32) calls the set of events a macroevent and each individual event a microevent. In the Continuous the event may be repeated, but the situation in which the events take place is always the same one.

In this section we are going to concentrate on the Progressive and Continuous, but not the Habitual, which involves two events—the
macroevent and the microevent—and presents specific problems that cannot be dealt with.

In the bibliography about progressive periphrasis in English, it has been stated both that the periphrasis is stative and that it is dynamic. There are also contradictions to be found regarding equivalent periphrases in Romance languages. Some authors, such as Dik (1987:62), have maintained that the periphrasis is stative, whereas the corresponding “imperfectos”, imperfective simple tenses, are dynamic. To Dik’s way of thinking, the main clause of (31a) contains a stative event, while in (31b) the event is dynamic:

(31) a. Cuando entré, estaban cantando.
   ‘When I went in, they were singing’
   b. Cuando entré, cantaban.
   ‘When I went in, they were singing’

In fact Dik (1987:62),\(^{10}\) considers the Progressive, as with all aspectual relationships which he calls phasal, to be the relationship between a state and

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\(^{10}\) Dik (1987:60-63) distinguishes three classes of aspectual relationships:

A- The opposition Perfective / Imperfective.
   Dependent on if the State of Affairs (Event) is presented from an external point of view as a whole (Perfective) or from an internal point of view as incomplete (Imperfective).

B- The phasal relationship.
   The relationship between a defined point on the time axis and a State of Affairs. Dik (1987:60) makes seven possible distinctions:
   1. Prospective;
   2. Immediate Prospective;
   3. Ingressive;
   4. Progressive;
   5. Egressive;
   6. Immediate Perfect.
   7. Perfect.

C- The quantificational relationship.
   The quantification of groups of occurrences of a certain State of Affairs. Dik (1987:63) identifies five varieties:
   1. Habitual;
   2. Continuous;
   3. Semelfactive;
   4. Iterative;
   5. Frequentative.
an event, as is usually the case with the Prospective and the Perfect. He defines these two aspe\-ctual varieties as follows:\footnote{Aspect is not a deictic grammatical category; Dik’s definitions are meant to be combined with a time value in the Present; this is why the moment of speaking is mentioned in them.}

\textbf{Prospective}: It is stated at the moment of speaking that  
- John is such at the moment of speaking that  
- the State of Affairs 'John is a rich man' will obtain after the moment of speaking.

\textbf{Perfect}: It is stated at the moment of speaking that  
- John is such at the moment of speaking that  
- the State of Affairs 'John is a rich man' obtained before the moment of speaking.

These definitions explain the much-commented impression that in the Perfect and the Prospective there is a dislocation between the aspe\-ctual focus and the event. In the example in the Perfect (32a), the absence of the secretary at three o'clock is a State of Affairs subsequent to her departure. Similarly, with the Prospective in (32b), it is not stated that the person was phoning you, but rather that he was ready to do so. Therefore Dik’s definitions explain this relationship between a state and an event in the Perfect and the Prospective:

(32) a. A las tres, la secretaria ya se había ido.  
   ‘At three, the secretary had already left’  
   b. A las nueve, iba a llamarte.  
   ‘At nine, I was going to phone you’

Dik does not define the Progressive, but, based on the definitions of the Prospective and Perfect and what he says on page 64 of his paper, we can draw up the following definition:

\textbf{Progressive}: It is stated at the moment of speaking that  
- John is such at the moment of speaking that  
- the State of Affairs ‘John is singing’ obtains at the moment of speaking.

Notice that the feeling we had about the Perfect and Prospective is lost in the definition of the Progressive. There is no natural way of understanding that
there is a relationship between the event and a state which coincides with the same event. We will come back to this point later.

The idea that the Progressive is stative would for some authors explain why progressive periphrasis is normally incompatible with states. Vlach (1993) also qualifies the Progressive as stative. However, Bertinetto (1994) believes the opposite to be true, that the periphrasis is dynamic. Smith (1991: 113) agrees that the Progressive is dynamic, but not so the imperfective simple past.

Bertinetto argues forcefully that the periphrasis is dynamic, especially when it comes to stative predicates. It is true that when stative predicates combine with progressive periphrasis they become clearly dynamic, as happens in (33b) compared to (33a):

(33)  a. Juan es tonto.
     'John is stupid'
   b. Juan está siendo tonto.
     'John is being stupid'

If we claim that the predicate in (33b) has become dynamic, it would be contradictory to maintain that the construction is stative.

The fact that authors have described progressive periphrasis in completely contradictory terms makes the concept of ‘stative predicate’ seem confused. In specialized bibliography scholars have suggested that the negation is stative, and that the Perfect, the Habitual Imperfective and the Prospective are too, without defining the exact meaning of ‘stative’ in these cases and assuming confusingly that these constructions function like lexical states. It is true, however, that the periphrasis shares syntactical properties with states. One of these is well known: the periphrasis has no imperative:

(34)  a. *¡Está cantando (tú)!
     ‘Be singing!’
   b. *¡Está llorando!
     ‘Be crying’

Naturally, attempts have been made to explain this affirming that the Progressive is a state; it is common knowledge that in normal conditions states have no imperative, due to the non-agentive nature of the subject:

(35)  a. *¡Sabe la verdad (tú)!
     ‘Know the truth!’
b. *¡Estad cansados!
   ‘Be tired!’

In infinitive clauses beginning with *al*, non-stative predicates can be interpreted temporally, but states cannot, as we can see in (36) and (37) respectively:

(36) a. Al entrar, me sonrió.
    ‘When he came in, he smiled at me’

b. Al acabar la carta, comenzó a llorar.
    ‘When he finished the letter, he began to cry’

(37) a. Al estar enfermo, no asistí a la reunión.
    ‘As I was ill, I didn’t attend the meeting’

b. Al tener hambre, salí a comer algo.
    ‘As I was hungry, I went out for something to eat’

As is true of the states in (37), the progressive periphrasis in these cases can never be interpreted temporally, but rather causally:

(38) a. Al estar escribiendo, no le oí.
    ‘As I was writing, I didn’t hear him’

b. Al estar acabando la carta, no respondió al teléfono.
    ‘As he was finishing off the letter, he didn’t answer the telephone’

In nominal clauses after verbs of speech, stative infinitives are interpreted as current (39), whereas infinitives in non-stative predicates are considered Habitual or Attitudinal (40).\(^{12,13}\) The periphrasis (41) again functions like stative predicates. First the examples without periphrasis:

(39) a. Dice tener hambre.
    ‘He says he’s hungry’

b. Dice estar enfermo.
    ‘He says he’s ill’

(40) a. Dice leer el periódico.
    ‘He says he reads the newspaper’

---

12 I owe this observation to Ignacio Bosque (p. c.).
13 By Attitudinal we understand the constant predisposition of the individual denoted by the subject towards the event. See also the commentary to the examples in (68).
b. Dice hacer ejercicio.
   ‘He says he exercises’

In (39) a current event and the act of speaking denoted by *dice*, ‘says’, are simultaneous, whereas in (40) the event is habitual, not current. In (40a), for example, it is not stated that he is reading the newspaper at this moment. If the infinitives in (40) are replaced by progressive ones (41), there is again simultaneity with a current event, as in (39):

(41) a. Dice estar leyendo el periódico.
   ‘He says he’s reading the newspaper’

b. Dice estar haciendo ejercicio.
   ‘He says he’s exercising’

The model we have adopted for our theory neatly explains the paradox that in certain contexts progressive periphrasis functions syntactically like states, but is interpreted as dynamic. Let us explain why this is so.

The Progressive focuses on a single moment of an event. Since activities and accomplishments are relationships between states, focusing on a single moment means focusing on a state. Let us suppose that in the activity in (42) it is the state $S^{N-1}$, which is in square brackets in (43). The dynamic interpretation of the Progressive derives from the fact that this state has a temporal relationship with the preceding states and that an individual cannot be in two different places simultaneously.

(42) Juan estaba caminando.
   ‘John was walking’

(43) Activity – $S^1$ … $S^2$ … $S^3$ … $[S^{N-1}]$ … $S^N$  (To walk)

In this sense it is understandable that the Progressive has been considered a state and has been said to function syntactically like a state in the above examples. In (43) it can be seen that the Progressive focuses on one of the states which make up the activity denoted by *caminando*, ‘walking’.

Returning to Dik’s definitions of the Prospective and the Perfect, and that of the Progressive which is based on his, we can see that although it is possible to conceive the first two as a relationship between a state and an event, such a relationship seems forced and unnatural with the Progressive. In fact, in the Prospective and the Perfect the relationship may be conceived as being between an event and a state that respectively precedes or follows the event in question. However, with the Progressive it is not clear how an
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event can be related to a state that would inevitably be different from the event itself but nevertheless simultaneous with it. Our solution to this problem is that the state being focused on is one of the states that make up the event.

In addition, this may also explain the fact that in Spanish, as in many other languages, the progressive periphrasis is formed with a copula, a verb that is clearly associated with stative predicates. This is one of the arguments for the Progressive to be considered stative, but we have seen that Bertinetto’s hypothesis on the dynamicity of examples such as Juan está siendo inteligente, ‘John is being intelligent’, is indisputable. Our theory explains why the periphrasis is interpreted as being dynamic, a characteristic derived from the temporal relationship between the states that make up the event, and at the same time it explains the presence of the stative auxiliary.

Let us take a look at how progressive periphrasis combines with stative predicates. It is known that a state in the Progressive may be ungrammatical (44a) or dynamic (44b):

(44)  a. *Juan está siendo de Cuenca.
     ‘John is being from Cuenca’
     b. Juan está siendo inteligente.
     ‘John is being intelligent’

By focusing on a single moment of an event, the Progressive sequentialises the event, since the state focused on is linked temporally to the previous state, which in turn is related to a previous state, and so on back to the first-state. Predicates that don’t permit this sequentialisation, such as ser de Cuenca, ‘to be from Cuenca’, lead to ungrammatical sentences. Those that do permit it produce grammatical sentences, but become dynamic because they are no longer a single state but a sequence of states. It should be noted that there are two types of interpretation of the ungrammaticalness of states in the Progressive. The first simply maintains that the periphrasis is stative and therefore incompatible with states. Needless to say, this in no way constitutes an explanation.

The second interpretation supposes that the Progressive focuses on an instant, and since states cannot be modified by punctual time adverbials; this made them ungrammatical. However, this needs to be qualified. Look at the following pairs of sentences where the adverbials a las tres, ‘at three o'clock’, and en aquel momento, ‘at that time’ or ‘at that moment’, alternate and where there is a different predicate in each pair. In (45) and (46) the sequences with a las tres predicate in each pair. In (45) and (46) the sequences with a las tres are incorrect and those with en aquel momento are correct, no doubt because of the strictly punctual nature of the former. But
what we wish to emphasise is that in (47) and (48) the sequences are correctly formed with both adverbials:

(45) a. ??A las tres vivíamos en Madrid.
   ‘At three o'clock we {lived/were living} in Madrid’
   b. En aquel momento vivíamos en Madrid.
   ‘At that time we {lived/were living} in Madrid’

(46) a. ??A las tres tenía anginas.
   ‘At three o'clock I had tonsillitis’
   b. En aquel momento tenía anginas.
   ‘At that time I had tonsillitis’

(47) a. A las tres estaba triste.
   ‘At three o'clock I was upset’
   b. En aquel momento estaba triste.
   ‘At that moment I was upset’

(48) a. A las tres estábamos en el bar.
   ‘At three o'clock we were in the bar’
   b. En aquel momento estábamos en el bar.
   ‘At that moment we were in the bar’

This shows that the supposed incompatibility between states and punctual adverbials is relative, and that it occurs with predicates that denote more stable events, i.e. events that are unlikely to cease suddenly or immediately. We might therefore expect progressive periphrasis to be compatible with less stable states, like those in (47) and (48). This is not the case, however, as can be seen in the following examples:

(49) *A las tres estaba estando triste.
   ‘At three o'clock I was being upset’

(50) *A las tres estábamos estando en el bar.
   ‘At three o'clock we were being in the bar’

If progressive periphrasis just focused on one moment of an event, (49) and (50) could be expected to be as acceptable as (47) and (48). There has to be another reason for the ungrammaticality of (49) and (50). In our opinion, the Progressive does not focus on one moment of an event, but rather on a state that belongs to a sequence of states. The incompatibility of states with the
Progressive is due to the fact that states are not made up of states, but are singular events, which do not contain momentary intermediate states to be focused on by the Progressive.

An explanation is also required regarding the dynamisation of states that combine with the Progressive. Focusing on one point in the development of an event such as *A las tres estaba allí*, ‘At three o'clock I was there’, does not automatically make it dynamic. The explanation lies once more in sequentialisation: in our opinion the Progressive focuses on a momentary state, which in any well-formed sentence interpreted as Progressive makes a sequence of states inevitable.

With respect to verbs of motion that denote fictitious motion, such as those in (9) and repeated in (51), the impossibility of their combining with the Progressive (52a) or of them doing so without denoting real movement, marked # in (52b), is also due to sequentialisation. The Progressive does not isolate a state spatially; it cannot focus on a specific piece of the road as it passes Sigüenza, for example, since the verbal inflection expresses time, not space. Consequently, the Progressive isolates a state temporally, not spatially. Hence the dynamic interpretation.

(51)  

\[ \begin{array}{ll} 
| \text{a. La carretera va de Madrid a Zaragoza.} & \text{‘The road goes from Madrid to Zaragoza’} \\
| \text{b. La nube va desde Valladolid a Burgos.} & \text{The cloud goes from Valladolid to Burgos} \\
\end{array} \]

(52)  

\[ \begin{array}{ll} 
| \text{a. *La carretera está yendo de Madrid a Zaragoza.} & \text{‘The road is going from Madrid to Zaragoza’} \\
| \text{b. #La nube está yendo desde Valladolid a Burgos.} & \text{‘The cloud is going from Valladolid to Burgos’} \\
\end{array} \]

The examples in (51) are from Moreno Cabrera (2003:123).

Moving on to the Continuous, which is represented in the following examples by the periphrases \(<\text{andar} + \text{gerund}>\) (53a) and \(<\text{ir} + \text{gerund}>\) (53b), we can see that the part of the event focused on is longer than an instant, it is rather a transition between states. In (54) this is indicated by the square brackets:

(53)  

\[ \begin{array}{ll} 
| \text{a. Juan andaba diciendo tonterías.} & \text{‘John kept making stupid remarks’} \\
| \text{b. Iba nevando cada vez más.} & \text{‘It was snowing more and more heavily’} \\
\end{array} \]
This explains why continuous periphrases are typically formed with verbs of motion, whereas progressive one is formed with the stative auxiliary *estar*.$^{14}$ We have said that a period of a process is a process but an instant of a process is a state. Therefore in our view auxiliaries in continuous periphrases are archetypically verbs of motion, i.e. verbs that lexically denote processes, while auxiliaries in progressive periphrases are copulas or other stative predicates, i.e. verbs linked to the expression of stativity.

Continuative periphrases are a similar case. By Continuative we understand the aspectual variety where the event is focused on from its beginning up to an internal point in its development. In Spanish the Continuative is expressed by the periphrases <$llevar$ + gerund> (55a) and <$venir$ + gerund> (55b). In (55a), for example, the person started to cry at three and has continued to do so up to the moment of speaking without interruption. This is what (56) is meant to represent:

\[
\text{(55) a. Lleva llorando desde las tres.} \\
\quad \text{‘He has been crying since three o’clock’} \\
\text{b. Viene protestando desde esta mañana.} \\
\quad \text{‘He has been complaining since this morning’}
\]

\[
\text{(56) [S}^1 \ldots S^2 \ldots S^3 \ldots S^N] \ldots S^{\text{GOAL-1}}
\]

The focus here is on a period rather than a state, i.e. on a series of states. This explains why auxiliaries in the Continuative are verbs of motion.

Progressive periphrasis can clearly be interpreted as Continuative given the right adverbials (57a), or simply as Continuous (57b), but our theory explains the basic use of auxiliaries in progressive, continuous and continuative periphrases, and especially why <$estar$ + gerund> is originally a progressive periphrasis. Extending a form to contexts from which it was in principle excluded is typical of the process of grammaticalization.

\[
\text{(57) a. He estado trabajando desde las ocho de la mañana.} \\
\quad \text{‘I have been working since eight this morning’} \\
\text{b. Estuve durmiendo toda la tarde.} \\
\quad \text{‘I was sleeping all afternoon’}
\]

$^{14}$ The same is true in Italian: continuous periphrases are formed with *andare* and *venire* and progressive periphrasis with *stare.*
Our model provides an answer to the question of whether the imperfective simple past of states should be interpreted as Continuous or Progressive. This question was put by Bertinetto (1986:182ff). Let us consider the following examples:

(58)  

(a) Cuando llegué, tenía un hambre feroz.  
     ‘When I arrived, I was starving’

(b) Me asomé un segundo a la puerta y vi que Renato estaba tumbado en la cama.  
     ‘I glanced into the room and saw that Renato was lying on the bed’

These are translations of examples (23) and (24) in Bertinetto (1986:187).15

Both “imperfectos” in (58) would seem for Bertinetto to be examples of the Progressive Imperfective Aspect, since the focus is on a single instant of the event. Bertinetto (1986:183) provides us with the following examples of stative predicates which can be interpreted as being Continuous Imperfectives:

(59)  

(a) En aquel período tenía mucho que hacer, ahora las cosas van un poco mejor.  
     ‘During that time I was very busy. Now things are going a bit better’

(b) Ayer por la mañana, sentía un fastidioso dolor en una muela.  
     ‘Yesterday morning I felt an irritating pain in a tooth’

These are translations of examples (1) and (2) from Bertinetto (1986:183).16

This question has further implications. In many studies it is taken for granted either implicitly or explicitly both that progressive and continuous periphrasis correspond exactly to one of the values of the Imperfective aspect and that the ‘imperfective simple past’ verb form, which is associated precisely with the expression of the imperfective aspect, has those same

15 In Italian:

(i)  

(a) Quando arrivai, avevo una fame da lupi.  
(b) Mi affacciai per un attimo alla porta, e vidi Renato che era sdraiato sul letto.

16 In Italian:

(i)  

(a) In quel periodo avevo parecchio da fare; ora va un po’ meglio.  
(b) Ieri mattina sentivo un fastidioso dolore a un dente.
values. This is why Bertinetto asks which of the Imperfective values (Progressive, Continuous or Habitual) can characterise the imperfective simple past of a stative predicate. Up to now we have seen that the imperfective simple past and the imperfective progressive past are not really equivalent. They are roughly equivalent in activities (60) and accomplishments and (61), but are not so in states (62):

(60) a. Cuando entré, bailaban.
    ‘When I went in, they were dancing’
b. Cuando entré, estaban bailando.
    ‘When I went in, they were dancing’

(61) a. En aquel momento redactaba el informe.
    ‘At that moment, I was making out the report’
b. En aquel momento estaba redactando el informe.
    ‘At that moment, I was making out the report’

(62) a. Era muy listo.
    ‘He was very clever’
b. Estaba siendo muy listo.
    ‘He was being very clever’

This different effect according to the type of predicate to which the imperfective simple past and the progressive periphrasis are applied is due to the type of quantification in each form. The “imperfecto” selects a proper part of the event but does not sequentialise in the way the Progressive does. We have seen that a state becomes dynamic in the Progressive due to this sequentialisation. We can therefore conclude that progressive periphrasis has a dynamizing effect, but that the “imperfecto” does not.

This explains why the imperfective simple past can be used both in dynamic and static situations, but that the Progressive can only be used in the former:

(63) a. Juan decía hola a sus padres.
    ‘Juan was saying hello to his parents’
b. Juan estaba diciendo hola a sus padres.
    ‘Juan was saying hello to his parents’

(64) a. Su carta decía hola.
    ‘His letter said hello’
b. #Su carta estaba diciendo hola.
   ‘His letter was saying hello’

The example in (64a) is from Doiz Bienzobas (2001:131).

If a dynamic verb like decir is used statively (64a) it cannot be combined with progressive periphrasis, which shows that the imperfective simple past and progressive periphrasis are different grammatical mechanisms with different syntax and semantics. The examples in (60) and (61) are equivalent because the imperfective simple past is applied to a dynamic predicate, and although it does not have a dynamizing effect, it is not incompatible with dynamicity.

It should be noted, however, that in standard peninsular Spanish the imperfective simple past tends to have a stative interpretation and progressive periphrasis a dynamic one:

(65) a. Cuando llegué a la casa, la televisión funcionaba.
   ‘When I got home, the television was working’

b. Cuando llegué a la casa, la televisión estaba funcionando.
   ‘When I got home, the television was working’

In (65a) the imperfective simple past conveys that the television was in a working state. This is what Bertinetto (1994) calls Attitudinal, i.e. a constant predisposition of the individual denoted by the subject towards the event. Here this means that the television can be turned on at any moment even if it is not actually turned on, so the interpretation is stative, i.e. it is a property of the television that is being talked about. In (65b), on the other hand, the television is understood to be turned on at a specific moment, so the interpretation is dynamic.

This reasoning with respect to the imperfective simple past and progressive periphrasis can be applied to continuous periphrases. In (66) and (67) the continuous periphrases lead to ungrammaticality when combined with stative predicates (examples a) unless these are dynamic (examples b):

(66) a. *Luis todavía iba queriendo comprar el coche.
   ‘Luis still kept wanting to buy the car’

b. Iba entendiendo el problema cada vez mejor.
   ‘He was understanding the problem better and better’

(67) a. *Andaba estando moreno.
   ‘He was being tanned’
Examples (66a) and (66b) are adapted from Squartini (1998:263) and Martínez-Atienza (2006:174) respectively. That of (67b) is from Martínez-Atienza (2006:88).

As with the Progressive, the dynamization of continuous periphrases is attributed to their sequentialisation of the event, i.e. it being formed by a series of states.

In our opinion the interpretation of the imperfective simple past should be considered in the following terms. With states, it focuses on a proper part of the event denoted by the predicate. Given that any part of a state is a state, the imperfective simple past always focuses on a part of a state.

Continuous and progressive periphrases sequentialise the event and therefore make it dynamic for the reason stated above: given that an individual who is somewhere at a specific moment cannot be elsewhere at the same time, if two locative states are predicated of said individual each of them must be at a different time. Motion is produced precisely because the two states are predicated at different times; and as time has an order, Juan must have been in one place before the other and have moved from the first to the second.17

4.2. Granularity

Moreno Cabrera’s theory also permits us to reconsider the problem of granularity.

We saw in (25) Juan está escribiendo una novela, ‘Juan is writing a novel’, an example of what the bibliography calls the imperfective paradox. Rothstein (2004: 38) points out that the imperfective paradox exists because in accomplishments a proper part of the event is not the event itself. So, if the instant focused on by the Progressive in an example such as (25) is a proper part of an accomplishment, but is not an accomplishment itself, and the accomplishment can be interrupted, how can we maintain that it is an accomplishment? In other words, how can a proper part of an event be semantically linked to an end that may not be reached?

Activities and states do not give rise to the imperfective paradox since every proper part of a state is a state and every proper part of an activity is an activity. Even so, it has often been said that states are dense and

17 We have exemplified the processes involving displacement predicates (Table II), but the same is true for mutation predicates.
homogeneous but that activities are homogeneous but not dense. This means that states always divide up into portions of state and that between two moments of a state there can be nothing other than a portion of the state. Activities, on the other hand, are supposed to be homogeneous, which explains why they do not lead to the imperfective paradox, but not dense, i.e. that if a sufficiently short period of time were isolated it would not be an activity. This suggests that our ideas above may be revised in the following way: that each proper part of a state is a state, but only a sufficiently large part of an activity is an activity.

Bonomi and Zucchi (2001:151) illustrate this idea with the predicate bailar un tango, ‘to dance a tango’. If Terry is dancing a tango, which is made up of a certain number of steps, an event in which he only does part of the sequence cannot be considered a performance of the dance. For it to be true that Terry is dancing a tango a minimum interval must be established, which in turn varies according to the type of event concerned, since according to Bonomi and Zucchi the minimum interval for the tango is longer than that of the merengue.

This reasoning is not grammatical, but based on observation of reality. According to our theory, an instant of an activity is a state and therefore can never fulfill the condition of the minimum interval. In fact the definition of the granularity of activities comes up against that of the Progressive. The Progressive has been said to focus on a single moment (Bertinetto, 1986:120); if granularity were well defined, the Progressive should be incompatible with activities, since the instant focused on is by definition not long enough to permit the conditions that lexically define the predicate. Even if the Progressive were to focus on an interval and not an instant, we would not have resolved the problem. The question of granularity requires us to distinguish between the minimum intervals in different types of event. This means that if the definition of the Progressive is to be compatible with that of granularity it is necessary to accept that the former focuses on an interval that varies according to the type of event concerned. Moreover, the question would arise of the Progressive interval coinciding with that of the Continuous, which would be another undesirable consequence.

The question of granularity is confronted by another empirical problem. Progressive periphrasis, like the imperfective simple forms, can be used to describe events depicted in pictures or photographs. These portray a single instant, but we can nevertheless say as we look at a photograph: Aquí mis padres están bailando un tango or Aquí mis padres bailan un tango, ‘Here my parents are dancing a tango’. Of course, the theory of granularity

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18 See for example Dowty (1979) and (1986:42) and Taylor (1977).
considers such a sentence to be impossible. Obviously the interval in a photograph is not long enough for my parents to perform the steps which make up a tango. Despite this, it is not only possible but indeed extremely common to use the Progressive or the imperfective in these cases.

Let us see how this question may be incorporated into our theory of lexical aspect. The hypothesis of granularity is essentially that if an activity is divided up into sufficiently long intervals this results in portions of that activity, but if it is divided up into very short intervals, we have portions of its component parts instead. What our theory says is that when dividing an activity up into instants this results in states, since activities are relationships between states—transitions if the relationship between states is temporal. It is possible to use the Progressive precisely because it focuses on one of the states that make up the activity. This is why the Progressive may be used to describe photographed events, which are no more than states.

4.3. The Resultative and the Experiential Perfect

By Perfect we understand the aspectual variety that focuses on the period of time that follows the period when the event takes place. It is expressed by compound forms with haber ‘to have’, and three values are usually identified: the Resultative, the Experiential and the Continuative, examples of which are respectively as follows:

(68) a. Ya ha llegado.
   ‘He has (already) arrived’
   b. Yo ya he comido ostras.
   ‘I have eaten oysters’
   c. He sido feliz desde que lo conozco.
   ‘I have been happy ever since I met him’

The Resultative Perfect (68a) talks of the results of a prior action. In our example, this action is denoted by llegar ‘to arrive’, and an equivalent sentence would be está aquí, ‘he is here’. The Experiential Perfect talks of the state of affairs involving a kind of experience, in a very wide sense, which in (68b) is having eaten oysters at least once. The Continuative Perfect talks of an event which started at a point in the past and which has continued without interruption until the present. It is easy to observe that the Resultative and the Experiential in the examples (68a) and (68b) both affirm the state of affairs, i.e. the result or the experience, produced by a prior, finished event, while in (68c) the event has begun but not finished. In García Fernández (2004, forthcoming) we have argued against considering cases such as (68c)
examples of the Perfect but rather that they are Aoristic,\textsuperscript{19} which, with the right time adverbials, permits the event to go on until the reference point in Reichenbachian terms. Consequently, we will not be looking at cases like (68c) here.

First a clear distinction should be made between the Resultative and the Experiential. The former is always semelfactive, whereas the latter does not have to be. In the Resultative the focus is on the period after an occurrence of the verbal event. This occurrence can be complex even if it is not multiple, as in (69):

\begin{itemize}
  \item[(69) a.] Ya hemos dado cinco vueltas con el coche sin encontrar dónde aparcar.
  \textit{‘We have driven round five times without finding anywhere to park’}
\end{itemize}

In the example above events are quantified over, not occasions: on one occasion they drive around five times. In example (70a), on the other hand, occasions are quantified over, and in (70b) both occasions and events are:

\begin{itemize}
  \item[(70) a.] Tres veces llamé a la puerta.
  \textit{‘I knocked three times’}
  \item[(70) b.] Tres veces llamé a la puerta dos veces.
  \textit{‘I knocked twice three times’}
\end{itemize}

In the Experiential the occurrence can be multiple, i.e. the event can occur on more than one occasion. Accordingly, occasions and not events are quantified over in (71):

\begin{itemize}
  \item[(71) ] Yo he estado en París un par de veces.
  \textit{‘I have been to Paris a couple of times’}
\end{itemize}

Another fundamental difference between the two Perfects is that the Experiential always has an underlying adverbial which includes both the event and the subsequent state and which may be made explicit as \textit{hasta ahora}, ‘up to now’, or \textit{hasta entonces}, ‘up to then’, depending on the form of the auxiliary.\textsuperscript{20} This is the reason why even when there is only one occurrence of

\textsuperscript{19} Aoristic corresponds to what Comrie (1976:16ff) calls Perfective, and we are using this term to avoid confusion with the term ‘Perfect’. We define Aoristic as the aspectual variety that focuses on the event from its beginning to its end. The “pretérito perfecto simple”, perfective simple past, is the most representative form of the Aoristic.

\textsuperscript{20} \textit{Hasta ahora} with the “pretérito perfecto compuesto”, present perfect, and \textit{hasta entonces} with the “pretérito pluscuamperfecto”, past perfect.
the event the Experiential is never the same as the Resultative. A sentence like 

*Ya he leído esa novela*, ‘I have read that novel’, can be interpreted in two ways: the resultative, which means *ya he terminado de leer esa novela*, ‘I have finished reading that novel’, and the experiential, which means *en mi vida yo he leído esa novela al menos una vez*, ‘I have read that novel at least once at some time in my life’. The existence of the underlying adverbial\(^\text{21}\) in the Experiential also explains why the occurrence can be multiple. If this were not the case, the usual definition of the Perfect, which states that the Perfect focuses on the period that follows the event, would not cater for the Experiential, since there is nothing after the event that indicates that the event itself is multiple. There would be no way of conveying that the period focused on follows a series of occurrences and not only the last one. Let us suppose that the temporal-aspectual interpretation of sentences (72) and (73) is as below. The experiential (72) requires an adverbial that encompasses all the occurrences of the verbal event. Using Klein’s system (1992), the event is represented by the - sign, the time that follows or precedes the event by +, the period focused on by square brackets [ ] and the moment of speaking by MS:

\[
(72) \quad \text{Yo he leído esa novela varias veces.} \quad \text{‘I have read that novel several times’} \\
\text{MS} \\
\overset{++----+++---++++---++++[++++]}{\text{hasta ahora ‘up to now’}}
\]

\[
(73) \quad \text{Ya he terminado la tesis.} \quad \text{‘I have finished the thesis’} \\
\text{MS} \\
\overset{----------------------------++[++++]}{\text{}}
\]

What is interesting about the difference between the Resultative Perfect and the Experiential is that they require different lexical aspectual characteristics in the predicate. The Resultative produces barely acceptable or ungrammatical sequences with states (74) and activities (75)—marked # below. As a result, the following sequences are interpreted as experiential and not resultative:

\[
(74) \quad \text{a.} \quad \text{#Ya he tenido anginas.} \quad \text{‘I have already had tonsillitis’}
\]

\(^{21}\) Vlach (1993) supposes that there is always an underlying adverbial, which we agree with. The difference between the Experiential and the Resultative may be explained according to the different characteristics of the adverbials.
b. #Ya he estado en París.
   ‘I have already been to Paris’

c. #Ya he estado enfadado con él.
   ‘I have already been angry with him’

(75) a. #Ya he visto los Campos Elíseos.
   ‘I have already seen the Champs-Élysées’

b. #Ya he bailado tangos.
   ‘I have already danced tangos’

c. #Ya he comido paella.
   ‘I have already eaten paella’

Telic predicates in the same context are immediately interpreted as Resultative:

(76) a. Ya he escrito el telegrama.
   ‘I have already written the telegram’

b. Ya han construido el nuevo hotel.
   ‘The new hotel has already been built’

c. Ya han redactado la reforma del Código Civil.
   ‘The Civil Code Reform has already been drafted’

This difference can be put down to the absence of a goal-state in states and activities and the presence of one in accomplishments and achievements. Telic events are bounded by a goal-state, which is focused on by the Perfect provided it is still valid at the moment of speaking or at the corresponding moment in the past. If it is no longer valid, the event cannot combine with the Resultative Perfect. Example (77) is acceptable as long as the goal-state estar dormido, ‘to be asleep’, is still valid:

(77) El niño ya se ha dormido.
   ‘The boy has (already) fallen asleep’

If this is not the case, the appropriate solution is clearly an Aorist with the form El niño se ha dormido or El niño se durmió, ‘The boy fell asleep’, according to the distribution of the two forms. The Resultative Perfect focuses on a state that is part of the subevent structure of the event: the goal-state. The Experiential Perfect does not focus on the goal-state, however. Consequently,

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22 In Spanish compound verb forms are aspectually ambiguous with respect to the Perfect or Aoristic interpretation; see García Fernández (1995).
the Resultative is only combined with telic predicates, whereas the Experiential does not have this limitation. Our theory explains this distribution depending on whether the event possesses a goal-state or not.

4.4. Quantified Goal-states

Our theory incorporates the view that goal-states can be quantified adverbially to the extent that they are like lexical states and can, in principle, be expressed lexically.

This is possible in different types of structures. One is a resultative construction such as the one formed with the verb tener, ‘to have’, and the participle of a transitive verb:

(78) a. Tengo la carta escrita desde esta mañana.
    ‘The letter has been written since this morning’
    b. Tenía las camisas planchadas desde hacía un buen rato.
    ‘The shirts had been ironed for a good while’

It is logical that the goal-state can be quantified in a resultative construction. Since it is precisely the result of the event that is focused on. What we want to concentrate on in this section, however, is the quantification of the goal-state with other aspectual varieties. One case is that of the Aorist:

(79) a. Me dormí (durante) una hora.
    ‘I fell asleep for an hour’
    b. Salí (durante) un rato a la calle.
    ‘I went outside for a while’

In (79) the adverbials cannot modify the events denoted by me dormí, ‘I fell asleep’, and salí, ‘I went out(side)’, which are achievements, i.e. punctual events. Moreover, the adverbials can begin with the atelic preposition durante, ‘for’, which as such combines with states and activities. Notice that the telic preposition for accomplishments and achievements is en, ‘in’:

(80) a. Me dormí en unos segundos.
    ‘I fell asleep in a few seconds’
    b. Salí en un instante a la calle.
    ‘I went outside in a flash’

Comparing examples (80) and (79) we can see that in (79) the resulting state is quantified, i.e. estar dormido, ‘to be asleep’, and estar fuera, ‘to be outside’. 
In (80), on the other hand, the quantification is of the time it takes to change state, i.e. reach the telos.

It is also possible to quantify the goal-state with the Habitual Imperfective:

(81)  a. Todas las tardes me dormía (durante) una hora.
        ‘Every afternoon I fell asleep for an hour’
    b. A diario salía (durante) un rato a la calle.
        ‘Every day I went outside for a while’

In the Habitual there is, in Bertinetto’s terms, a macroevent, or habit, and the microevents that make it up, each of which can have the characteristics of the Aoristic aspect. In the light of the examples in (79), those in (81) are to be expected.

In examples (79) we have that special type of achievement predicate that Bertinetto (1986) calls ‘reversible transformative’. These predicates are characterized precisely by this property, because two consecutive and contrasting changes of state bound a state. As a result, achievements could be divided into two groups: the non-reversibles in (82) and the reversibles in (83):

(82)  a. *Llegó (durante) media hora.
        ‘He arrived for half an hour’
    b. *Nació (durante) dos días.
        ‘He was born for two days’

(83)  a. Me dormí (durante) media hora.
        ‘I fell asleep for half an hour’
    b. Entró unos segundos en la sala de reuniones.
        ‘He went into the meeting room for a few seconds’

It should be noted that the resulting state of some achievements, such as llegar, ‘to arrive’, or nacer, ‘to be born’, cannot be quantified, unlike those of (79) and (83).

In order to explain this let us suppose that the subevent structure of the events denoted by predicates such as those in (82) is different from that of events denoted by predicates in (83), as is shown in (84a) and (84b), respectively:

(84)  a. Achievements 1= \( S^{\text{origin}} - S^{\text{goal}} \)
    b. Achievements 2= \( S^{\text{origin}} - S^{\text{goal}} - S^{\text{origin}} \)

\( (\text{llegar}) \)
\( (\text{dormirse}) \)
Examples such as (83) are in our opinion one of the best indications of the existence of subevents in structures as propounded by Moreno Cabrera (2003) or Pustejovsky (1991). It is absolutely necessary to postulate a subevent structure to explain examples such as (83). Predicates denoting punctual telic events like dormirse, ‘to fall asleep’, or entrar, ‘to go in’, should combine with durative adverbials beginning with en, ‘in’, as in (80)\(^{23}\) or with time location adverbials as in (85), but not with adverbials starting with durante, ‘for’, which are characteristic of durative atelic predicates:

(85)  
\begin{align*}
\text{a. } & \text{Me dormí a las dos.} \\
& \text{‘I fell asleep at two o’clock’}
\end{align*}
\begin{align*}
\text{b. } & \text{Entré en la sala en ese momento.} \\
& \text{‘I went into the room at that moment’}
\end{align*}

Note that in (85) there are two Aorists and not two Perfects. It may well be possible to quantify the resulting state with a Perfect, but is less likely than with an Aorist, which is the aspectual variety that focuses on the event from beginning to end. It is possible according to our theory on subevent structure, since the resulting state is part of the event’s structure whether it is focused on aspectually or not. If we did not accept that verbs like dormirse or entrar have a complex subevent structure like in example (84) we would find ourselves with a state modified adverbially but without syntactical representation, since, we insist, dormirse or entrar do not denote states.

5. Conclusion

Moreno Cabrera’s theory (2003) on lexical aspect is extraordinarily simple and uses a limited number of primitives: all events are made up of states. It has enabled us to explain the apparent paradox of the Progressive: that it is described as both stative and dynamic. We have also explained why in Spanish periphrases the progressive is formed with a copula, but the continuous and continuative are formed with verbs of motion. We have also discovered that granularity can be accounted for in terms of our knowledge of the world, not of grammar. In addition, the Resultative Perfect and the Experiential have been contrasted and explained in terms of the presence or not of a goal-state in the subevent structure. Finally, our theory demonstrates the adverbial modification of states which are apparently not present syntactically.

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\(^{23}\) In section 2 we said that achievements, despite being punctual predicates, can have a previous phase and can in such circumstances be quantified with durative adverbials.
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References


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